

## ABSTRACT

Multistage centrifugal compressor includes at least one stage which, in turn, has a lower half-tank, an upper half-tank, a series of lower half-diaphragms, a shaft equipped with a series of rotors, a series of upper half-diaphragms, a lower suction half-diaphragm, an upper suction half-diaphragm, the lower suction half-diaphragm and the upper suction half-diaphragm include a lower portion (71) and an upper portion (72), respectively, suitable for being coupled with the lower half-diaphragms and with the upper half-diaphragms, respectively, to form a first pile of lower half-diaphragms and a second pile of upper half-diaphragms, respectively.